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Descriptions of New Species of Lizards from Mexico of  
the Genus *Uta*, with Notes on Other Mexican Species

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ABSTRACT: The study is based upon Mexican specimens in the collections of Edward H. Taylor, David H. Dunkle and Hobart M. Smith. The species discussed are *Uta stansburiana stejnegeri*, *U. bicarinata*, *U. tuberculata*, *U. ornata ornata* and *N. ornata lateralis*. *Uta taylora* and *U. caerulea* are described as new.

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THE following notes and descriptions are based upon specimens belonging to the genus *Uta* in three collections of reptiles and amphibians from Mexico—one secured during the summer of 1932 by Dr. Edward H. Taylor and myself, the others during the summer of 1934, one by David H. Dunkle and myself, the other by Taylor. Specimens in the first collection are designated by EHT and HMS; in the second by DHD and HMS; in the third by EHT.

I wish to here express my appreciation for the aid received, in the collection and study of this material, from Dr. Edward H. Taylor, Mr. David H. Dunkle, Mr. C. D. Bunker and Dr. H. H. Lane. I am indebted in particular to Doctor Taylor for the privilege of studying and describing a portion of his personal Mexican collection. Thanks are also due to Dr. G. K. Noble, who kindly compared a specimen of *Uta tuberculata* with the type; and to Mr. J. C. Bay of John Crerar Library for his kindness in loaning necessary reference books. The study has been aided by a grant from the University of Kansas graduate research fund.

*Uta taylori* sp. n.

(Plate XXVI, fig. 3)

*Holotype.* Male, EHT No. 320a, collected July 3, 1934, ten miles northwest of Guaymas, Sonora, Mexico.

*Paratypes.* Thirty-one, including twenty-four from the type locality (Nos. 252-258, June 30; 280-284, July 1; 300, 304, July 2; 320, 321, 322, 323a, on July 3; 335, July 4; 393, July 6; 474, 474a, July 12; 500, July 13); four (Nos. 199-202) from a locality 54 miles southwest of Hermosillo, Sonora, June 26; three (Nos. 448-450) from a locality 12 miles northwest of Guaymas, July 10. All were collected during the summer of 1934 by Dr. Edward H. Taylor and are in his personal collection.

*Diagnosis.* A *Uta* of the *U. stansburiana* group; dorsal scales average about 106 from interparietal to base of tail; enlarged dorsals abruptly differentiated from granular laterals only on posterior fourth of body; ratio of length of fourth toe to distance from snout to gular fold averages .786 in males, .771 in females; a distinct dermal pocket behind the insertion of the hind leg; no lateral light lines present on neck or sides of body in either young or adults; dorsal and lateral surfaces of body with numerous light flecks; dorsolateral series of blotches very dim when visible.

*Description of Type.* Head flattened; snout pointed; interparietal more than twice as large as ear opening; frontoparietals in contact in front of interparietal, separating latter from frontal; three parietals on each side; frontal entire; five transversely enlarged supraoculars, the median larger than the others; a series of from one to three rows of small scales intercalated between supraoculars and superciliaries; a row of small scales surrounding inner margin of orbit; five superciliaries; three canthals, the posterior large and overlapping anterior superciliary; three small postnasals, one subnasal, one prenasal and one supranasal; two pairs of internasals, the anterior pair quite small; scales between internasals and frontal large; rostral about as wide as distance between the centers of the nares; section of rostral on top of snout truncate behind, lateral edges in contact with labials, also truncate; four scales between posterior canthal and labials; four upper and seven lower labials to a point below middle of eye; mental pentagonal; a pair of large postmentals, in contact medially; these in contact also with mentals and lower labials, and followed by a series of enlarged scales passing to the angles of the jaws, and decreasing in size posteriorly; this series of enlarged scales separated from the labials anteriorly by one

row of scales, posteriorly by three; median gular scales somewhat smaller than others; scales bordering gular fold larger than ventrals; temporals granular, except for three large scales in front of the ear and separated from the latter by about three rows of granules; three elongate scales on anterior border of ear, the upper largest and extending nearly halfway across ear opening; a dermal fold from ear to upper edge of lateral cervical pouch, thence to the upper edge of the gular fold, and above the insertion of the foreleg along the sides of the body to the groin; lateral cervical pouch small, low, more ventral than lateral in position; scales on body rounded, not mucronate; scales on nape granular, those on anterior half of nape not keeled, but with a single posterior dorsal projection; extreme laterals smooth, gradually becoming larger and keeled dorsally; laterals strongly differentiated from the dorsals only on posterior fourth of body; about eighteen rows of enlarged dorsals in a line between the centers of insertion of the hindlegs; dorsal rows of scales strongly converging posteriorly; dorsals on foreleg slightly larger than dorsals on body, rounded, and keeled except on hand; ventrals on upper foreleg granular, those on lower foreleg about as large as dorsals of the same member, smooth; lamellar formula for fingers 9-14-18-18-13; scales on anterior surface and anterior half of dorsal surface of femur about twice as large as largest dorsals on body, smooth on femur except in median dorsal region; ventral scales of femur somewhat smaller than ventral abdominals, smooth; dorsal scales on tibia somewhat smaller than those on anterior surface of femur, keeled, some mucronate; ventral tibial scales somewhat larger than dorsals on tibia; lamellar formula for toes 9-15-20-26-17; dorsal scales of tail about three times as large as largest dorsals on body, strongly keeled and mucronate; subcaudal scales smaller and smooth; ventrals on body smooth, rounded, of about equal size except in interfemoral region; ventral interfemorals about one half as large as preanals or abdominals; a distinct demal pouch behind insertion of hindleg.

Color above blue-gray, with small light-blue flecks scattered over sides and a few in the middorsal region; about seven very dim, narrow bands of darker color may be discerned on the back; base of tail with a very few flecks of bright, almost iridescent, blue; all but proximal fifth of tail dimly banded; limbs irregularly and narrowly banded with brown and light; extreme lateral surfaces of body with irregular light spots; a dark blue blotch behind axilla; head light brown; upper labial region dimly banded with brown and whitish,

the bands continuous onto the lower labial region; gular region dark blue, some scales lighter, with light diagonal bands continuous with those of the labial region converging toward the median line of throat; extreme lateral surfaces of belly generally dark blue, with a few scales of light blue; a broad median area of belly whitish, suffused with blue; chest and preanal region white; anterior ventral surfaces of hindlimbs bluish, the remainder white; ventral surface of tail white.

*Variation.* The frontal is divided in all but two of the paratypes (Nos. 255, 500), but it varies much in the manner of division. In some it is divided transversely into three sections; in others either the anterior or the posterior section is divided longitudinally; occasionally, when the posterior section is thus divided, one part or both are fused to the corresponding frontoparietal. There are two large scales regularly present in front of the frontal (usually separated by a smaller scale), and this is preceded by three large scales which contact on either side of the posterior canthal; these scales are frequently variously modified—divided into several, fused together in part or fused with adjoining scales. Between these and the rostral are usually three pairs of median scales, the posterior two pairs of about equal size but much larger than the anterior pair. All are variable. Occasionally five upper and six lower labials occur. In details of scalation they are otherwise much like the type.

In males the dorsal ground color varies from greenish blue to gray, in some specimens light brown. In four or five a dim trace of dark spots on either side of the median dorsal line may be observed; in a few others the spots are fused on the median dorsal line, forming very dim, narrow, darker bands across the back, about seven in number.

Females do not differ from males greatly in coloration. The blue on the ventral surfaces is lighter, while that of the belly is almost entirely absent. The dorsal coloration is brownish gray to light brown; the blue flecks are absent, although the lateral light spots are frequently present. Some specimens are perfectly uniform in color over the entire back and sides; in five the darker spots on either side of the median dorsal line are very dimly visible, as in some males. In no females are they fused to form transverse bands.

Two young specimens are present in the series (No. 258, male, snout to vent measurement 31 mm.; and No. 448, female, snout to vent measurement 26.2 mm.). The larger is uniform brownish-gray

over the entire back. The smaller is brownish gray above, with a very dim trace of a series of dorsolateral darker spots, as in some adults. In neither are there light lines along the sides of the neck or body.

*Relationships.* *Uta taylori* is unquestionably related to the subspecies of *U. stansburiana*, yet its relationship cannot be close. It differs in the relative proportion of the length of the fourth toe and the snout to gular fold distance; the maximum size is less; the color pattern is very different from that of *U. stansburiana*, and the habitat is different.

The following table gives a summarized comparison of the relative proportion of the length of the fourth toe and the snout to gular fold measurement in *Uta stansburiana stejnegeri*, *Uta s. hesperis* and *Uta taylori*.\*

SPECIES		Males	Females
<i>stejnegeri</i> :	Maximum . . . . .	*(16) 1 080	*(8) .966
	Minimum . . . . .	(16) 800	(8) .800
	Mean . . . . .	(16) 916	(8) .8801
<i>hesperis</i> :	Maximum . . . . .	(13) .936	(7) .928
	Minimum . . . . .	(13) 811	(7) .824
	Mean . . . . .	(13) 8705	(7) .8697
<i>taylori</i> :	Maximum . . . . .	(9) 853	(10) .827
	Minimum . . . . .	(9) .722	(10) .687
	Mean . . . . .	(9) .7865	(10) .7715

\* The numbers in parentheses indicate the number of specimens

Full data on scale counts, measurements and proportions of *U. s. stejnegeri* are given in the table accompanying the discussion of that subspecies; the other tables, of *U. s. hesperis*\* and *U. taylori*, are given below for comparison.

\* The specimens of *U. s. hesperis* are in the Kansas University Museum, and were collected in the following localities: No. 12170, Los Angeles Co., Calif., June, 1925; 12156-12157, Montecito, Santa Barbara Co., Calif., Sept. 4-6, 1929; 11878, Kitchen Creek, San Diego Co., Calif., August, 1928; 2178, 2180-2181, Pine Valley, San Diego Co., Calif., May 16, 1926; 12093-12094, 12158-12160, same locality, Sept. 1, 1929; 12175, 12179, 12181, 12185, Palomar Mt., San Diego Co., Calif., August, 1928; 11612, 11617, 11620, 11622, Boulder Park, near Jacumba, San Diego Co., Calif., July 26, 1928.

Measurements and scale counts of *Uta stansburiana hesperis*

I Number	12093	11878	11617	11620	11612	2181	12094
II Sex	♀	♀	♀	♂	♂	♂	♀
III Snout to vent	40.5	42.0	42.5	43.5	44.5	46.0	46.0
IV Tail	73.0						
V Head width	9.7	9.8	8.5	10.7	9.2	9.9	9.6
VI Head length	10.0	10.4	9.5	11.0	10.9	11.0	10.5
VII Snout to gular fold	14.0	15.0	14.5	16.0	15.5	15.5	15.5
VIII Ratio, VII to III	.348	.357	.341	.367	.348	.336	.336
IX Foreleg	19.0	19.0	17.0	20.0	19.0	18.5	19.5
X Hindleg	31.0	31.0	30.0	34.8	34.2	35.5	31.3
XI Ratio, X to III	.765	.738	.705	.800	.768	.771	.680
XII Fourth toe	13.0	13.0	12.8	13.0	14.0	14.0	13.0
XIII Ratio, XII to III	.320	.309	.301	.298	.314	.304	.282
XIV Femoral pores	14-?	?	14-?	13-14	15-16	15-16	?
XV Dorsal scales	102	92	83	94	96	84	95
XVI Ventral scales	62	58	61	60	60	63	63
XVII Gular scales	28	27	27	33	29	31	28
XVIII Gular fold scales	17	15	18	18	15	18	18
XIX Ratio, XII to VII	.928	.866	.882	.817	.903	.903	.838

Measurements and scale counts of *Uta stansburiana hesperis*—Continued

I Number	12185	12179	12181	11622	12159	2180	2178
II Sex	♂	♀	♀	♀	♂	♂	♂
III Snout to vent	47.0	47.5	47.7	48.0	48.5	48.5	49.0
IV Tail		71.0			87.0	77.0	88.0
V Head width	10.7	9.7	10.0	9.7	10.8	10.5	10.8
VI Head length	11.5	10.5	10.7	10.0	12.0	11.0	12.0
VII Snout to gular fold	17.0	15.3	16.0	14.8	16.8	16.2	17.5
VIII Ratio, VII to III	.361	.322	.335	.308	.346	.334	.357
IX Foreleg	18.9	18.5	19.0	18.0	18.5	19.5	21.0
X Hindleg	36.0	32.9	32.0	30.7	33.0	37.2	37.8
XI Ratio, X to III	.765	.692	.691	.639	.680	.767	.771
XII Fourth toe	13.8	13.5	13.9	12.4	14.0	14.4	15.0
XIII Ratio, XII to III	.293	.273	.291	.258	.288	.296	.306
XIV Femoral pores	13-13	14-16	14-?	14-?	13-?	18-?	15-15
XV Dorsal scales	87	108	96	90	96	94	101
XVI Ventral scales	55	64	59	54	64	62	70
XVII Gular scales	29	28	29	29	34	31	32
XVIII Gular fold scales	18	16	13	12	17	12	18
XIX Ratio, XII to VII	.811	.882	.868	.824	.833	.888	.857

Measurements and scale counts of *Uta stansburiana hesperis*—Concluded

I	Number	12158	12175	12160	12157	12170	12156
II	Sex	♂	♂	♂	♂	♂	♂
III	Snout to vent	49.0	50.0	50.5	51.5	51.5	55.5
IV	Tail		88.0				
V	Head width	10.1	10.0	11.9	10.6	11.0	11.5
VI	Head length	11.0	11.5	11.0	11.0	12.0	12.2
VII	Snout to gular fold	17.4	16.5	16.7	17.0	17.5	18.0
VIII	Ratio, VII to III	.355	.330	.330	.330	.339	.324
IX	Foreleg	20.0	19.5	20.5	21.0	21.4	21.8
X	Hindleg	36.5	38.9	35.0	39.0	39.0	39.8
XI	Ratio, X to III	.744	.778	.693	.757	.757	.717
XII	Fourth toe	15.0	15.0	14.4	15.9	15.0	16.0
XIII	Ratio, XII to III	.306	.300	.285	.308	.291	.288
XIV	Femoral pores	13-13	15-15	14-15	15-?	14-14	14-14
XV	Dorsal scales	92	98	88	99	109	107
XVI	Ventral scales	64	60	65	62	66	61
XVII	Gular scales	32	29	31	32	31	28
XVIII	Gular fold scales	15	15	19	15	15	15
XIX	Ratio, XII to VII	.862	.909	.862	.935	.857	.888

Measurements and scale counts of *Uta taylori*

I	Number	202	199	256	257	255	281	323a
II	Sex	♀	♂	♂	♀	♀	♀	♀
III	Snout to vent	40.0	41.5	42.0	42.0	42.0	43.0	44.0
IV	Tail				63.5	69.0		
V	Head width	8.8	9.5	9.3	8.0	8.0	9.0	8.5
VI	Head length	10.2	10.5	10.1	9.9	10.0	10.0	10.5
VII	Snout to gular fold	14.8	15.1	16.0	15.0	14.8	15.1	16.0
VIII	Ratio, VII to III	.370	.363	.380	.357	.352	.351	.363
IX	Foreleg	19.5	19.5	20.0	19.0	19.0	19.0	18.0
X	Hindleg	31.5		35.0	32.0	31.5	30.5	30.5
XI	Ratio, X to III	.787		.833	.761	.750	.709	.670
XII	Fourth toe	12.0		13.3	12.0	12.0	11.2	11.0
XIII	Ratio, XII to III	.305		.316	.285	.285	.260	.250
XIV	Femoral pores	16-17	16-16	14-16	13-14	15-16	13-16	16-17
XV	Dorsal scales	110	92	105	102	102	103	108
XVI	Ventral scales	59	56	59	56	55	59	57
XVII	Gular scales	32	28	36	30	28	31	29
XVIII	Gular fold scales	15	14	16	20	16	19	17
XIX	Ratio, XII to VII	.810		.831	.800	.810	.741	.687

Measurements and scale counts of *Uta taylori*—Continued

I Number	280	320	284	393	500	304	320a
II Sex	♀	♀	♀	♂	♂	♀	♂
DI Snout to vent	44.5	44.5	45.0	45.0	45.5	46.5	46.7
IV Tail				84.0			79.0
V Head width	8.9	8.9	9.0	9.7	9.5	8.8	9.6
VI Head length	10.9	10.0	11.0	11.8	11.0	10.5	11.7
VII Snout to gular fold	15.0	14.5	16.2	16.4		16.0	16.3
VIII Retic, VII to III	.337	.325	.360	.364		.344	.349
IX Foreleg	20.0	18.0	19.5	22.0		20.0	22.0
X Hindleg	32.5	31.0	33.5	36.5		34.5	34.0
XI Ratio, X to III	.730	.696	.744	.811		.741	.728
XII Fourth toe	12.2	12.0	12.0	14.0	13.5	12.0	13.0
XIII Ratio, XII to III	.274	.269	.266	.311		.258	.278
XIV Femoral pores	13-14	14-15	17-17	15-16	16-?	14-14	14-14
XV Dorsal scales	108	109	111	108	106	106	102
XVI Ventral scales	57	57	62	63		65	60
XVII Gular scales	30	29	33	33		31	35
XVIII Gular fold scales	22	17	21	19		20	15
XIX Ratio, XII to VII	.813	.827	.740	.853		.750	.797

Measurements and scale counts of *Uta taylori*—Concluded

I Number	282	283	474	254	335	322	450
II Sex	♀	♂	♂	♂	♂	♂	♂
III Snout to vent	47.0	48.0	48.0	48.0	48.0	48.0	48.0
IV Tail	74.0	82.0		87.0		81.0	
V Head width	9.0	9.8	9.9	9.7		9.5	10.0
VI Head length	10.7	11.3	11.0	11.0	11.8	11.5	12.0
VII Snout to gular fold	16.0	16.5	16.0	17.5	18.0	17.5	17.8
VIII Ratio, VII to III	.340	.343	.333	.364	.375	.344	.370
IX Foreleg	20.0	21.5	21.0	21.5	20.0	20.0	22.0
X Hindleg	34.0	37.0	35.5	37.0	35.5	37.5	
XI Ratio, X to III	.723	.770	.739	.770	.739	.781	
XII Fourth toe	11.8	13.0	12.8	14.0	13.0	13.8	14.0
XIII Ratio, XII to III	.287	.270	.266	.291	.270	.311	.291
XIV Femoral pores	14-14	15-15	16-17	15-17	14-15	14-14	16-?
XV Dorsal scales	116	117	105	104	108	105	111
XVI Ventral scales	61	61	65	66	61	57	64
XVII Gular scales	30	33	33	32	30	31	32
XVIII Gular fold scales	20	16	15	21	18	13	22
XIX Ratio, XII to VII	.737	.787	.725	.800	.722	.788	.786



The maximum length, from snout to vent, which males of *U. taylori* reach is about 48 mm.; males of *U. stansburiana stejnegeri* frequently attain a length of 54 mm.; and males of *U. stansburiana hesperis* frequently are 50 mm. long, occasionally reaching 55 mm.

All subspecies of *Uta stansburiana* possess the same basic color pattern: lateral light lines on the neck and sides of body, especially distinct in the young, and distinct dorsal spots, only occasionally indistinct in large males. No lateral light lines are present in *U. taylori*, and the dorsal darker spots are always indistinct and usually entirely absent or modified to form transverse bands.

*Uta stansburiana* is typically a lizard of the open desert areas, not frequenting rocks except as they occur in small scattered groups in more or less level areas or at the bases of hills. *Uta taylori*, on the other hand, frequents only rock cliffs of desert mountains, shunning the open desert plains. They are much more wary than *U. stansburiana*, and much less conspicuous.

In relation to its habitat, it is interesting to note that *U. taylori* possesses much shorter and stouter claws than either *U. s. stejnegeri* or *U. s. hesperis*. It is to be assumed that this difference is directly related to an environmental influence, *U. stansburiana* occupying an ecological niche which, because of its lesser "resistance," would permit a greater claw length than would the more "resistant" niche which *U. taylori* occupies, where short, stout claws with a clinging and more or less grasping power are essential.

It may be noted that *U. taylori* differs from *U. s. stejnegeri* also in the regular presence of a distinct dermal pocket behind the insertion of the hindleg. In *U. s. stejnegeri* this pocket is rarely present in males, and never in females. It is regularly present, however, in *U. s. hesperis*. Another difference is the greater number of dorsal scales from the interparietal to the base of the tail in *U. taylori*. Thirdly, the enlarged dorsal scales of *U. taylori* are abruptly differentiated from the laterals only a short distance anterior to the hindlegs.

The presence of this species in Sonora might suggest the possibility of its being identical with some form of Baja California. However, it would appear that it is only remotely related to these described forms, with the possible exception of *U. elegans*, a species whose identity has long been a problem. It has frequently been considered a synonym of *U. stansburiana*, and numerous authors have placed the species with the form now known as *U. stansburiana*

*stejnegeri* Schmidt (1922), who regarded *U. elegans* as a distinct species, distinguished it from *U. stansburiana* by the greater ratio of the length of the hindleg to the snout-vent measurement (.74 to .85 in 18 males, average .80), and by the different average number of dorsal scales from the interparietal to the base of the tail (max. 106, min. 82, av. 91, in twenty specimens). In these characters *U. elegans* can be seen to be quite different also from *U. taylori*. No specimens of *U. elegans* have been available for comparisons, but on the bases of nonconformity with the diagnostic characters of *U. elegans* as shown by Schmidt, of the closer relationship of this form to *U. stansburiana*, and of geographic probabilities, I here consider *U. taylori* as distinct from *U. elegans*.

*Remarks.* The species is named for Dr. Edward H. Taylor, who collected the specimens and very kindly permitted me to study and describe them.

*Uta stansburiana stejnegeri* Schmidt

Fifty-two specimens of this form are in the collections, from the following localities: Sonora: Near Empalme, July 13, 1934 (EHT Nos. 501-503, 514-516a). Durango: Near Avileo, August 25, 1932 (EHT and HMS Nos. 4389-4390); 5 miles north of Conejos, June 25, 1934 (DHD and HMS Nos. 294-295); 25 miles north of Bermejillo, June 27, 1934 (DHD and HMS No. 340). Coahuila: 10 miles east of Torreón (EHT and HMS Nos. 4388, 4409; August 30 and 25, 1932, respectively); near San Pedro, August 30, 1932 (EHT and HMS Nos. 4308, 4491-4514); 5 miles south of San Pedro, June 29, 1934 (DHD and HMS Nos. 345, 363-367); near deserted village 30 miles west of La Rosa, August 30, 1932 (EHT and HMS Nos. 4526-4532, 4570). Chihuahua: 15 miles south of Juárez, June 19, 1934 (DHD and HMS Nos. 78, 79).

The specimens do not differ to any marked extent from those in the Kansas University Museum from New Mexico, Arizona and western Texas. The specimens from Empalme, Sonora, show no closer approach to *Uta taylori*, collected not more than ten miles north, than do other specimens from Mexico and the United States. The dorsal scales are larger in size and smaller in number from the interparietal to the base of the tail, and are abruptly differentiated from the laterals, anterior to the sacrum, more than half the distance between the groin and axilla. The postfemoral dermal pocket is present in only one large male; the average ratio of the length of

the fourth toe to the distance from snout to gular fold is that of *U. s. stejnegeri*, not *U. taylori*; and the color pattern is distinctly that of *U. stansburiana* and its subspecies, with two lateral light lines on the neck (and on the body in the young) and distinct dorso-lateral dark spots in some specimens of both sexes. The specimens were collected in a habitat not frequented by *U. taylori*: three were taken on a sandy beach near the ocean, and the others in a desert plain about a mile from the beach.

The subspecies has been reported in Mexico from northeastern Baja California (Meek, 1905; Schmidt, 1922), Sonora (Tepoca Bay, San Pedro Bay, Tiburon Is., Patos Is., Pelican Is.; Van Denburgh, 1922) and Chihuahua (Richardson, 1915). The specimens of *U. stansburiana* collected by Mearns at Poso de Luis and Sonoyta in Sonora, and reported by Cope (1900), probably belong to the subspecies *stejnegeri*.

Measurements and scale counts of *Uta stansburiana stejnegeri* Schmidt

I Number	4501	4500	4491	503	4503	4499	514
II Sex	♀	♀	♀	♀	♂	♀	♂
III Snout to vent	30.0	33.8	34.0	34.0	35.0	36.0	39.5
IV Tail							
V Head width	6.7	8.0	7.2	7.5	7.5	8.0	8.0
VI Head length	7.4	8.7	8.0	8.5	9.0	8.5	9.2
VII Snout to gular fold	12.1		12.5	12.5	12.5	13.5	14.0
VIII Ratio, VII to III	.403		.367	.367	.357	.375	.354
IX Foreleg	13.8	15.5	14.5	15.0	16.0	16.5	16.8
X Hindleg	21.5	23.0	26.5	27.0	27.5	30.0	31.2
XI Ratio, X to III	.716	.696	.779	.705	.785	.805	.789
XII Fourth toe	11.7	12.5	11.0	10.5	13.5	12.8	13.0
XIII Ratio, XII to III	.390	.369	.323	.308	.357	.355	.329
XIV Femoral pores	13-?		16-15	14-15	14-16	15-15	13-14
XV Dorsal scales	85	88	87	88	87	84	98
XVI Ventral scales	60	65	64	64	60	66	60
XVII Gular scales	31	31	28	31	30	33	34
XVIII Gular fold scales	11		16	16	14	15	15
XIX Ratio, XII to VII	.966		.880	.840	1.08	.948	.928

Measurements and scale counts of *Uta stansburiana stejnegeri* Schmidt  
 —Continued

I	Number	4502	4509	516a	501	502	516	4532
II	Sex	♂	♀	♀	♂	♂	♂	♀
III	Snout to vent	40.0	40.3	43.0	45.0	46.0	47.5	48.0
IV	Tail	76.0	74.3		96.0	96.0	89.0	
V	Head width	8.0	8.3	9.0	10.7			9.2
VI	Head length	9.1	9.5	10.5	11.5			10.7
VII	Snout to gular fold	14.3	14.0	15.5	16.2			17.3
VIII	Ratio, VII to III	.357	.347	.360	.360			.360
IX	Foreleg	17.8	18.8	19.0	20.0	21.0	19.5	21.0
X	Hindleg	30.0	32.0	31.0	38.5	36.5	36.0	36.5
XI	Ratio, X to III	.750	.794	.720	.855	.797	.757	.760
XII	Fourth toe	14.0	13.8	12.8	15.0	15.0	15.0	14.2
XIII	Ratio, XII to III	.350	.342	.297	.333	.326	.315	.295
XIV	Femoral pores	17-?	15-15		15-16	15-16	15-?	15-15
XV	Dorsal scales	88	87	94	91	93	90	82
XVI	Ventral scales	66	67	56	67	59	64	61
XVII	Gular scales	30	34	30	30	28		31
XVIII	Gular fold scales	13	18	16	15	17	17	17
XIX	Ratio, XII to VII	.979	.985	.802	.925			.820

 Measurements and scale counts of *Uta stansburiana stejnegeri* Schmidt  
 —Continued

I	Number	4508	4498	515	4504	4496	4530	4531
II	Sex	♂	♂	♂	♀	♂	♂	♂
III	Snout to vent	51.0	51.0	51.0	51.3	51.8	52.0	53.0
IV	Tail	90.0	82.5		81.0	95.5	110.0	101.0
V	Head width	10.0	10.0	10.0	9.1	10.5	10.6	10.3
VI	Head length	11.0	11.0	11.5	10.2	11.0	11.0	11.3
VII	Snout to gular fold	18.8	18.5	17.5	18.0	18.0	18.0	17.5
VIII	Ratio, VII to III	.368	.362	.343	.350	.347	.346	.330
IX	Foreleg	22.5	20.5	20.0	19.1	23.0	22.1	23.2
X	Hindleg	39.0	39.0	37.5	35.2	41.0	39.3	41.5
XI	Ratio, X to III	.764	.764	.735	.688	.791	.755	.783
XII	Fourth toe	16.0	16.0	13.5	14.4	16.2	17.0	17.0
XIII	Ratio, XII to III	.315	.313	.313	.280	.312	.326	.321
XIV	Femoral pores	15-16	14-14	14-16	16-?	15-14	15-15	15-15
XV	Dorsal scales	85	87	92	91	85	86	84
XVI	Ventral scales	63	63	61	68	65	61	64
XVII	Gular scales	28	28	31	34	34	30	30
XVIII	Gular fold scales	17	16	16	17	16	15	15
XIX	Ratio, XII to VII	.851	.864	.800	.800	.900	.944	.971

Measurements and scale counts of *Uta stansburiana stejnegeri* Schmidt  
—Concluded

I Number .....	4529	4495	4497	4493	4492	4527
II Sex.....	♂	♂	♂	♂	♂	♂
III Snout to vent .....	53.0	53.5	54.0	54.0	54.0	54.8
IV Tail.....		96.7	102.0			
V Head width .....	10.2	11.0	11.0	11.2	10.5	11.0
VI Head length.....	11.0	11.5	11.3	11.5	12.0	12.0
VII Snout to gular fold .....	18.3	19.0	17.2	18.8	18.5	19.0
VIII Ratio, VII to III .....	.345	.355	.318	.348	.342	.346
IX Foreleg .....	23.0	21.0	23.0	22.0		23.8
X Hindleg .....	40.0	40.0	42.0	41.0	38.0	42.5
XI Ratio, X to III .....	.754	.747	.777	.759	.703	.773
XII Fourth toe .....	16.1	16.1	17.3	17.0	16.8	17.0
XIII Ratio, XII to III .....	.303	.300	.320	.314	.311	.310
XIV Femoral pores.....	14-15	15-15	15-15	16-15	15-16	14-14
XV Dorsal scales.....	84	81	89	88	85	90
XVI Ventral scales.....	59	60	65	62	60	60
XVII Gular scales .....	30	30	30	28	31	30
XVIII Gular fold scales.....	12	17	14	16	15	16
XIX Ratio, XII to VII.....	.879	.847	1.000	.904	.903	.894

*Uta bicarinata* (Duméril)

Fifteen specimens were collected during the summer of 1932, by Dr. Edward H. Taylor and myself, in the following localities: Guerrero: 11 miles southwest of Puente de Ixtla, June 22 (EHT and HMS Nos. 672-675, 750); near Junction of Mexico-Acapulco highway and Rio Balsas (EHT and HMS Nos. 839, 1581, June 23 and July 2, respectively); 12 miles south of Chilpancingo, June 26 (EHT and HMS Nos. 1018-1019); 2 miles north of Agua Bendita, July 3 (EHT and HMS No. 1626). Morelos: Near Puente de Ixtla, July 4 (EHT and HMS Nos. 1627-1628); 4 miles south of Cuernavaca, June 22 (EHT and HMS Nos. 718-720). Oaxaca: Near Chasumba, July 28 (EHT and HMS No. 3212).

In two specimens the frontal is transversely divided posteriorly, and the posterior section is divided longitudinally; in four other specimens the frontal is greatly reduced in size, apparently the posterior portion having been separated and fused with the frontoparietals, which are proportionately increased in size. The character of the median rows of enlarged dorsals varies considerably in

the series. In some specimens the rows are continuous and unbroken from the nape to the tail, but in most specimens the rows are distinctly broken into four sections by the replacement of the large scales, at more or less regular intervals, by granular scales. In the large males the alternation of granules and enlarged scales is very conspicuous. There are regularly present five longitudinal rows of enlarged tubercles on the sides, the lower row in contact with the ventrals about midway between the forelegs and hindlegs. The series of enlarged dorsals begin on the shoulders, although there are numerous scattered enlarged tubercles on the neck, sometimes forming two short series, more widely separated than the dorsal rows on trunk. The ear is bordered anteriorly by a few large granules, which are sometimes elongated. The ventrals are distinctly, although not strongly, mucronate. It is noteworthy that the pocket behind the insertion of the hindleg which is present in *U. ornata* and its subspecies, as well as certain others, is absent in *U. bicarinata*.

The dorsal surfaces are grayish; a neck band of darker gray or black is visible in all specimens; posterior to this and anterior to the base of the tail are four broad transverse bands, in some cases partially or completely interrupted on the median dorsal line, and in some males almost or quite invisible; in some specimens narrow dark bands are visible on the tail. In males the sides of the belly are whitish, sometimes suffused with orange, and the broad median area is blue, darker anteriorly; the breast and lower surfaces of limbs and tail are whitish, sometimes lightly suffused with blue or orange; the entire gular region is orange, coarsely reticulated or diagonally barred with black except in a large, round median area just anterior to the gular fold. The coloration of the gular region is very similar in females; the blue of the belly is lacking, but there are present instead numerous black spots, indefinitely outlined.

The specimen from Oaxaca differs in a number of respects from the others of the series. The ventrals are abruptly differentiated from the laterals, and are of almost uniform size, not decreasing laterally. They are more strongly mucronate and weakly keeled near the sides of the belly. The scales bordering the gular fold extend beyond the middle of the insertion of the foreleg, and are as large on the sides as in the median line, and weakly keeled. The median gular area, which is immaculate in the other specimens, is irregularly spotted with black. Otherwise, in scalation, proportions and coloration, the specimen is within the range of variation shown in the other specimens.

The species is apparently entirely arboreal. Some specimens were found on some of the large species of cacti of the genus *Opuntia*. Their coloration is extremely protective; they were frequently discovered only by striking likely-looking trees with a shovel or heavy stick. Usually two or more occurred together on the same tree or cactus.

*U. bicarinata* has been reported from the following states: Guerrero (Gadow, 1905); Colima (Dugès, 1896); Tepic (Dugès, 1896); Sinaloa (Boulenger, 1885; Günther, 1890); Jalisco (Günther, 1890); Durango (Boulenger, 1885; Günther, 1890); Guanajuato (Dugès, 1896); Morelos (Boulenger, 1885; Günther, 1890); Oaxaca (Sumichrast, 1880); Puebla (Bocourt, 1874; Cope, 1885, 1887; Ferrari-Perez, 1886; Günther, 1890); Michoacán (Dugès, 1896); and Chihuahua (Cope, 1887, 1900; doubtful). It is probable that a number of the above records are based upon specimens which actually belong to some of the species recently described by Schmidt (1921), which are related to or superficially resemble *U. bicarinata*.

#### *Uta tuberculata* Schmidt

(Plate XXVI, fig. 1)

A single specimen (EHT No. 552, male) was collected by Taylor fifteen miles south of Presidio de Mazatlán, Sinaloa, Mexico, July 19, 1934.

Although similar to *Uta bicarinata*, the species is apparently very distinct. The specimen agrees with most diagnostic characters proposed by Schmidt (1921) except that the head is shorter, not longer, in proportion to the snout-vent measurement than is the head of *U. bicarinata*, and the preauricular spines are of about the same size in the two species. Dr. G. K. Noble, who has kindly had this specimen compared with the type and paratypes of *U. tuberculata*, states that these two characters are exaggerated in the type, and that our specimen compares well with the paratype series.

The enlarged granules on the back and sides are disposed in five longitudinal series; the lower series is in contact with the ventrals at a point halfway between the axilla and groin. The enlarged tubercles are proportionately larger than those of *U. bicarinata*. The ventrals are very slightly mucronate or rounded; in *U. bicarinata* they are more strongly mucronate, much more so toward the sides of the abdomen. The color pattern is practically identical in the two species.

The measurements are as follows: snout to vent, 41 mm.; tail, 62 mm.; total length, 103 mm.; ratio, tail to total length, .601; foreleg, 18 mm.; hindleg, 25 mm.; length of head, 9.5 mm. (to anterior margin of ear); breadth of head, 8.2 mm.

*Uta cacrulca* sp. n.

(Plate XXVI, fig. 2)

*Holotype*. Male, DHD and HMS No. 132, collected about thirty miles north of Chihuahua City, Chihuahua, Mexico, June 21, 1934.

*Paratypes*. Twelve, including DHD and HMS Nos. 127-131 and 133, collected with the type; and Nos. 138-143, collected about twenty miles south of Chihuahua City, June 22, 1934; all collected by David H. Dunkle and Hobart M. Smith.

*Diagnosis*. Frontal divided; a series of enlarged, weakly keeled dorsals on either side of the median dorsal line, beginning on shoulders and continuing posteriorly to the base of tail; about two rows of small, weakly keeled scales on median dorsal line of body, one row continuing onto tail a distance about equivalent to length of femur; dorsolateral row of tubercles indistinct; oblique and lateral rows of tubercles absent, as well as lateral fold; scales on dorsal surface of tibia much larger than any of the enlarged dorsals on body; head as broad as long (measured to the posterior edge of interparietal) or broader; males with the entire ventral surfaces of body and tail, except chest, base of tail and an area between the hind legs, sky blue; dorsum with about seven transverse black bars on each side; bars usually blue-edged.

*Description of Type*. Head scales smooth, flat; frontal divided; interparietal more or less triangular in shape, about as long as broad, very narrowly in contact with frontal; one frontoparietal and one enlarged parietal on each side; a series of small scales bounding inner margin of orbit; a series of five to six enlarged supraorbitals, separated from the superciliaries by two or more rows of small scales; anterior fourth or fifth of orbital region occupied by small scales; three canthals, the anterior terminating below the nostril; nasals separated from rostral and upper labials by a single row of small scales, and from each other by two large internasals; rostral narrowly in contact with internasals; a single loreal, separated from upper labials by two rows of small, elongate scales; five superciliaries, the one immediately above eye overlapped at either end by the adjacent superciliary; one enlarged, heavily keeled, pentagonal



preocular; a long, heavily keeled subocular, contacting preocular; two small, elongate, moderately keeled scales bordering orbit posterior to subocular; four upper and six (right) or seven (left) lower labials to a point below middle of eye; mental sharply angular, pentagonal, its labial border slightly more than half that of rostral; two large scales in contact with mental posteriorly, and with each other on the median line; these two scales followed posteriorly by a row of scales gradually diminishing in size, and separated from the labials anteriorly by one row of small elongate scales, posteriorly by three; scales of gular region small, rounded, not imbricate except near gular fold, where they become somewhat triangular and slightly larger, especially on the edge of the gular fold; granular scales of gular fold more numerous toward sides, almost lacking on median ventral line; temporal scales small, those between eye and ear smallest, those between parietals and upper edge of ear larger; three large, smooth, triangular lobules on anterior edge of ear, the median extending about one-third of the distance across; ear oval, its vertical diameter greatest, less than the length of interparietal; a deep lateral cervical pouch about halfway between ear and anterior border of insertion of foreleg; a longitudinal fold from near upper border of ear to upper edge of lateral cervical fold, and from there to upper edge of gular fold, surmounted by slightly enlarged granules, largest and most numerous anteriorly; a group of enlarged granules on side of neck above and between lateral cervical fold and ear, separated by five or six granules from a smaller group of enlarged tubercles posterior to the former group; other scales on neck granular; enlarged dorsals beginning on neck, continuing posterior in two rows on either side of median dorsal line, weakly keeled, the inner row largest; enlarged dorsals between hind legs smaller, in four or five rows on either side; two rows of small scales on middorsal line, weakly keeled, continuing onto tail a distance slightly greater (measured from posterior margins of hind legs) than length of femur; an indistinct dorsolateral series of small tubercles, mostly keeled, beginning behind shoulders and terminating above hind leg; a few very slightly enlarged tubercles on sides, not disposed in a longitudinal series; no lateral fold; dorsal scales of foreleg keeled, except on digits, the larger scales larger than dorsals on body; ventral scales of upper foreleg very small, almost granular, those on lower foreleg much larger, smooth; scales under foot keeled, mucronate; lamellar formula for fingers 8-12-15-16-12; ventrals on body small, smooth, rounded and imbricate, of about equal size except those near

groin, which are smaller; scales on anterior surface of femur larger than dorsals on body, keeled, becoming smaller and smooth toward femoral pores; posterior surface of femur with granular scales which continue dorsally to the middle of the femur, where they are in contact with the abruptly enlarged anterior scales; dorsals of tibia larger than scales on femur, keeled, the ventrals smaller, smooth; scales on foot keeled, the ventrals mucronate; lamellar formula for toes 8-12-17-23-17; caudal scales more or less uniform, rather weakly keeled; 27 scales around fifth verticil; scales at sides of tail granular; a dermal pocket behind insertion of hind leg.

A broad, black band present from shoulder to lower posterior margin of orbit, touching upper edge of ear and becoming lighter anteriorly; a very distinct narrow, black line from anterior margin of insertion of foreleg to the longitudinal black band above; a light band, with scattered areas of light blue, from axilla to groin; seven undulating black bars across back, bordered by sky blue, the posterior two bars indistinct; neck, area between the blue on sides, occipital region of head, median dorsal areas between the black bands, also the base of tail, bluish gray; some of black crossbars branching on sides; anterior portion of head grayish, mixed with areas of sky blue; forelimbs grayish, with a few small areas of blue, and about seven narrow black bands; hind legs mostly grayish, with areas of blue surrounding the few irregular black bands; tail bluish gray, with indistinct bands of black; sides of body below light line reticulated with light blue and black; belly entirely blue, darker in median area and with a few lines of darker blue on sides; chest, portion of gular region posterior to lateral cervical folds, and ventral surfaces of limbs dirty white; entire gular and labial region anterior to lateral cervical folds uniform sky blue; anal region blue, separated by a dirty white area, confluent with that of hind limbs, from the blue of belly; tail dirty white at base, blue and gray predominating posteriorly.

*Variation.* Females lack entirely the blue coloration characteristic of the males. The dorsum is light gray, the head lighter; the dark transverse bars on back and limbs are but very dimly visible. The ventral surfaces are whitish, with a few streaks or spots of black on the sides of the abdomen and in the labial region.

In diagnostic scale characters the paratypes are quite uniform and much like the type. The cephalic scales, as in other species of *Uta*, vary considerably. The enlarged dorsals are small and weakly keeled in all specimens, much smaller than the large scales on the

dorsal surface of the tibia. In all specimens the small scales between the series of enlarged dorsals on body continue onto the tail a distance about equal to the length of the femur. The gular fold is in most specimens distinctly separated for its entire length from the ventrals on chest; in three there is but a single row of granules on the median ventral line in the gular fold. As shown in the table of measurements, the width of the head is in all paratypes equal to or greater than the length (measured to the posterior margin of the interparietal). The dorsolateral row of tubercles is indistinct, and the lateral row of tubercles and the lateral fold are absent.

The male paratypes are approximately the same in coloration as the type. The dark, transverse bands across the body are usually interrupted medially. Most striking is the general suffusion of blue over the entire dorsal and ventral surfaces, especially on the latter. In one very dark specimen (No. 143) the back is almost entirely black, the blue being confined to bars and spots on the sides. The entire belly is blue, coarsely reticulated with black on the sides; the chest, ventral surfaces of limbs and the area between the hind limbs are heavily suffused with blackish.

In a younger male (No. 142), the blue in the gular region is confined to a small median area, and the blue on the belly is confined to elongate lateral patches, as normally occurs in the fully adult males of *U. ornata ornata*.

Measurements and scale counts of *Uta caerulea*

Number	140	139	142	133	138	141
Sex	♂	♀	♂	♂	♂	♂
Snout to vent . . . . .	42.0	43.0	44.0	44.0	44.3	46.0
Tail . . . . .		54.2		65.5		
Head width . . . . .	9.5	8.5	9.7		9.0	10.0
Head length . . . . .	9.5	8.5	9.0	9.6	9.0	9.5
Scales to head length	19	12	15	15	15	14
Snout to gular fold . . . . .	15.0	14.2	14.5	14.5	16.0	16.0
Foreleg . . . . .	18.0	15.9	17.5	19.5	19.5	18.5
Hind leg . . . . .	27.5	22.5	30.5	29.0	30.0	29.0
Fourth toe . . . . .	11.0	9.5	11.5	12.0	11.2	10.8
Lamellae, fourth toe . . . . .	22-?	19-19	21-21	19-19	19-21	19-20
Femoral pores	?	9-10	11-12	11-11	12-13	11-11

Measurements and scale counts of *Uta caerulea*—Concluded

Number.....	129	128	143	130	131	132	127
Sex.....	♂	♀	♂	♂	♂	♂	♂
Snout to vent.....	46.8	48.1	49.0	49.0	49.0	49.5	50.5
Tail.....		70.0			66.5	68.5	
Head width.....	10.0	9.0	10.0	10.0	10.0	10.0	10.5
Head length.....	10.0	9.0	10.0	10.0	10.0	10.0	10.2
Scales to head length.....	15	13	12	16	14	15	14
Snout to gular fold.....	16.6	15.5	16.0	16.3	17.0	16.5	17.5
Foreleg.....	21.0	18.0	19.2	20.0	20.0	20.0	20.5
Hind leg.....	31.5	28.0	29.8	28.5	32.0	30.0	32.5
Fourth toe.....	12.2	10.9	11.0	12.0	12.2	12.5	12.5
Lamellae, fourth toe.....	22-23	20-21	21-21	20-20	19-19	23-?	20-21
Femoral pores.....	10-12	10-12	10-10	10-10	11-12	11-12	10-11

*Comparisons.* This species is apparently most closely related to *U. ornata ornata*. It differs from this in the possession of a much broader head (longer than broad in *U. ornata*, usually about 10 percent) and a broader, heavier body; the small scales between the rows of enlarged dorsals continue onto the base of the tail a distance about equal to the length of the femur (only a very short distance in *U. ornata ornata*); the tubercles on the dorsolateral line are smaller and fewer; the lateral fold and the enlarged lateral tubercles normally found in *U. ornata ornata* are absent; the enlarged dorsals are smaller in *U. caerulea*, much smaller than the enlarged scales on the dorsal surface of the tibia (of about the same size or larger in *U. ornata ornata*); and the coloration is much different in the males. Males of *U. caerulea* never have an orange throat, and the blue which replaces it extends over the entire labial region, while in *U. ornata* the blue, if present, is sharply differentiated from the whitish labial region. Blue is rarely present in the dorsal coloration of *U. ornata ornata*, and the lateral blue areas on the abdomen of males do not fuse to the extent shown in *U. caerulea*.

*U. caerulea* differs from *U. ornata symmetrica* as it does from *U. ornata ornata*; it lacks also the oblique rows of tubercles on the sides of the body. *U. ornata lateralis* differs in that the enlarged dorsals begin on the neck instead of on the shoulders.

*Remarks.* A postfemoral dermal pocket is now known to be regularly present in *U. ornata* and its subspecies, *U. caerulea*, *U. levis*, *U. stansburiana hesperis* and *U. taylori*, and is variable in cer-

tain other species and subspecies. The presence of this pocket in certain forms of *Uta*, combined with other characters, is extremely interesting from a phylogenetic standpoint.

It has been recently pointed out (Smith, 1934) that in certain species of *Sceloporus* of the *S. variabilis* group there is present a rudimentary gular fold immediately in front of the arm which is homologous to the gular fold present in *Uta*. In *Sceloporus* it is most distinct in *S. couchii* and *S. merriami*. In the former species, there is present also a distinct dermal pouch immediately behind the insertion of the hind leg. The dorsal scales are extremely small for the genus, the laterals are minute, and the size of the species itself is small.

In *Uta levis* (as well as in the related *U. ornata*) the gular fold is remarkably poorly developed. It is frequently interrupted medially, the scales of the gular region passing directly into the ventrals; in many cases in which the fold is not thus completely interrupted, small scales replace medially the tiny lateral granules. In *U. levis* the lateral scales are uniform in size and very minute—practically granular—but visibly imbricated. The enlarged dorsals are in some specimens in several rows, gradually decreasing in size laterally and grading into the lateral scales. There is present also the dermal pocket behind the insertion of the hind leg, as in *S. couchii*. Its size is comparable with that of the latter.

It is not a far cry from the smaller, almost granular lateral scales of *Uta levis* to the larger, but yet minute, laterals of *S. couchii*; nor is it impossible to conceive of an increase in size of the lateral dorsals from a few rows of enlarged scales to several or many. The rudimentary gular fold of *S. couchii* is comparable with the partially developed fold of *U. levis*. A dermal pocket behind the insertion of the hind leg is present in each, and the sizes of the species are comparable.

It may be stated that the nearest point of contact between the two genera, so far as it can be traced in living forms, is between the species *levis* of *Uta* and *couchii* of *Sceloporus*. It cannot be said that either gave rise to the other; it is more likely that the two diverged from an ancestral type not greatly different from the above two species—*Sceloporus* perhaps later than *Uta*. By this view the *variabilis* group (to which *couchii* belongs) is the most primitive of the genus, while the *torquatus* group is probably the most highly developed, unless *Sceloporus* is of diphyletic origin. By the same token, the *ornata* group of *Uta* (to which *levis* belongs) may be

considered the most primitive of its genus, while the *mearnsi* group is probably the most highly developed.

*Habits.* The specimens from north of Chihuahua City were collected on large boulders on steep hillsides, usually near the top. The males were brilliantly colored and could be seen as far as the eye could distinguish objects of their size. They were rather wary, but occasional specimens were caught by hand. The females, because of their lighter coloration, were difficult to distinguish on the gray limestone rocks which they frequented. Scattered small trees were present on the hillsides, but no *Utas* were found on them.

The specimens from south of Chihuahua City were collected in a similar habitat, except that the brush was scant and trees absent. Some specimens were found under rocks, probably having sought refuge there upon our approach.

*Uta ornata ornata* (Baird and Girard)

A single male specimen (DHD and HMS No. 72) was collected on red granite rocks in the hills three miles south of Samalayuca, Chihuahua, Mexico, on June 19, 1934.

The characters of this specimen are obviously those of *U. ornata ornata*, and show no tendency toward intergradation with *U. caerulea*. The scales on the dorsal surface of the tibia and anterior surface of the femur are subequal and approximately of the same size as the enlarged dorsals on body; the small scales between the rows of enlarged dorsals continue back onto the tail base only a few millimeters beyond the posterior margins of the hind legs; the head is narrower than in *U. caerulea* and the granular scales are lacking in the middle of the gular fold, this being almost obsolete medially; the gular region in life was orange, with a median bluish area; and, although the snout to vent measurement is about equal to that of the largest specimen of *U. caerulea*, the blue patches on either side of the belly are distinct, separated medially by six to seven scale rows.

Both the dorsolateral and lateral rows of tubercles are indistinct, although present. A certain amount of blue is present in the dorsal coloration, about the black transverse lines.

Snout to vent, 48.5 mm.; tail, 82.0 mm.; snout to posterior margin of interparietal, 10.0 mm.; width of head, 9.8 mm.; snout to gular fold, 16.3 mm.; foreleg, 20.0 mm.; hind leg, 32.5 mm.; base of fifth toe to end of fourth, 12.3 mm.; scales to head length, 13; scales under fourth toe, 22-23; femoral pores, 13-14.

Apparently the only record of this form from Mexico is that of Gadow (1905, p. 194), who mentions specimens (designated as *Uta elegans*) from Juárez, Chihuahua. The specimens of *U. bicarinata*, mentioned by Cope (1887, p. 35), from the City of Chihuahua are more likely *U. caerulea* than *U. ornata ornata*; it is very improbable that they are actually *U. bicarinata*. Cope mentions with these specimens from Batopilas, Chihuahua. Since this locality is on the western slope of the Sierra Madre, it is highly improbable that the specimens are *U. ornata ornata*, and it is quite as unlikely that they are *U. bicarinata*. Before the exact identity of these specimens can be stated, a reexamination of them will be necessary.

*Uta ornata lateralis* (Boulenger)

Thirty-nine specimens were secured by Taylor during the summer of 1934 in the state of Sonora, at the following localities: Eight miles south of Magdalena, June 20 (EHT No. 78); near Noria, June 20 (EHT Nos. 85, 86); 30 miles south of Noria, June 22 (EHT Nos. 107, 108, 109, 109a); five miles southwest of Hermosillo (EHT Nos. 130, 138, 139, June 23; Nos. 183-185, June 25); ten miles northwest of Guaymas (EHT Nos. 251, 251a, 251b, 251c, June 30; Nos. 275-278, 291, July 1; No. 309, July 3; Nos. 337, 338, 338a, July 4; No. 1140a, August 5); near Miramar (EHT Nos. 355-357, July 5; Nos. 405, 405a, 405b, July 7; Nos. 498, 499, July 13).

The ventral coloration of the males in the series is peculiarly variable, probably due in part to the extreme chromatic variability of individuals in life. The gular region is in two specimens brilliant and iridescent bluish, without a trace of yellow or orange. In two other specimens the gular region is lighter blue. In the remainder of the series, the gular region is either white (occasional males of moderate size [50.5 mm. snout-vent], most females and young males), or the region is yellow to orange. The blue-throated specimens are all adults, but not of maximum size, while the yellow or orange-throated specimens range in snout to vent measurement from 41.5 mm. to a maximum of 54 mm.

A postfemoral dermal pocket is regularly present behind the insertion of the hind limb.

The subspecies has been recorded in Mexico from the states of Sinaloa (Boulenger, 1883) and Sonora (Baird, 1859; Cragin, 1884; Garman, 1887; Van Denburgh, 1922; Allen, 1932).

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## PLATE XXVI

FIG. 1. *Uta tuberculata*. EHT No. 552, male. Actual total length, 103 mm.

FIG. 2. *Uta taylori*. EHT No. 320a, male holotype. Actual total length, 125.7 mm.

FIG. 3. *Uta caerulea*. DHD and HMS No. 132, male holotype. Actual total length, 118 mm.

PLATE XXVI

